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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/675,820

09/30/2003

Gary K. Michelson

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EXAMINER

SWIGER III, JAMES L

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,820

Applicant(s)

GARY MICHELSON

Examiner

James L. Swiger

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3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/18/2007.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-28 are rejected under 35 U.S.C. 102(e) as being unpatentable over Cauthen (US Pub 2003/0135220) in view of Zucherman et al. (US Patent 6,699,247). Cauthen teaches a guard for use in spinal surgery having a body (12), having a leading end (17) and opposite trailing end (15), the body having a first portion (18) and a second portion (37) in a pivotal relationship with one another (see figs. 13 and 14), the proximate leading end (17) having an open and closed position. The first (18) and second (37) portions have at least in part opposed interior arcuate portion (14), respectively, and wherein the first and second portions define an opening for providing access to the disc space, a space that may be considered a tube and is adapted to provide access and guide therethrough a surgical instrument. The opening defined by the first and second portions of the body is generally circular but may also be elliptical (see paragraph 0039). Also the body's exterior surface has opposed upper and lower surfaces that are in part arcuate as well; wherein the exterior surface of the body has opposed side surfaces that are also in part arcuate and generally parallel; these sides also generally provide and are capable of providing a circular or elliptical cross section when in both the open and

closed positions. The device may also be considered angled in the open position, at any given point between fully closed and fully open. The first and second portions also cooperatively engage each other when in a closed position (refer to Fig. 12). Further Cauthen teaches first and second portions that move rotatably to one another via a hinge, as they are associated with one another (par. 0034). Cauthen further describes that the device is able to create a disc space, as an 'open position' because of the ability of the device to rotatably articulate, creating a height (par. 0012) and allowing other devices to pass through. This orientation is considered along the mid-longitudinal axis. The device may also be secured/locked (par. 0045, line 15), and also comprises a collar (26, par 0040). Cauthen also teaches a body opening that has a height between 6-24 mm (par. 0038). Note that as claimed the opening as required for an instrument is between 8-25mm. However the range for Cauthen's device is 6-24. Therefore the device of Cauthen, as it is smaller, would be able to work within the situation as claimed by the applicant, meeting the size constraints. Cauthen teaches an opening between 6-24mm and would by default be able to fit a device within the 8-20mm opening from the claimed invention. Further Cauthen teaches that the hollow tube may accommodate a bone removal device such as a reamer (disclosed in line 3 of paragraph 0038; or for an implant driver, also considered an insertion instrument (disclosed in lines 4-5 of paragraph 00390; or further a spinal implant (line 5 of paragraph 0039). With regards to the implant being partially bioresorbable, Cauthen further teaches that the spinal implant may be coated with a biocompatible material such as hydroxyapatite, which is inherently biocompatible/resorbable, as it has a similar chemical composition as human bone. The

implant itself may also be made of a metal such as titanium (Par. 0042).

Cauthen et al. disclose the claimed invention except for more specifically an axis that passes through at least a portion of the pathway, allowing the two portions to articulate and distract vertebrae. Zucherman et al. in Fig. 13 shows a distraction mechanism that distracts vertebrae (88/90) via a point that extends as an axis through at least a portion of the pathway. Though Zucherman et al. discloses a device that appears to have two intersecting halves, it teaches an axis that at least passes through a portion of the pathway. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Cauthen having at least the axis that passes through at least a portion of the pathway in view of Zucherman et al. to better use the device to distract the vertebrae.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cauthen '220 and Zucherman et al. as applied to claim 21 above and further in view of Gruskin et al. (US 2003/0023209). Cauthen and Zucherman et al. disclose the claimed invention except for an implant that is incorporated with a material to prevent scarring. Gruskin et al. discloses a substance, namely a cross-linked polysaccharide having a positive charge that allows for the wound site to heal with less scarring. (See par. 0010). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate into the method of Cauthen and Zucherman et al. an anti-scarring additive in view of Gruskin et al. to better allow the wound area to heal with less damage.

Claim 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Cauthen

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'220 and Zucherman et al. as applied to claim 21 above and further in view of Mansourt et al. (US 2003/0229401). Cauthen and Zucherman et al. disclose the claimed device of the spinal implant except for an implant having an antimicrobial agent. Mansouri et al. discloses an anti-microbial agent to prevent the colonization of bacteria on the surfaces of the implant or other parts of the device, or more specifically while treating a non-metallic medical device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate into the device of Cauthen and Zucherman et al. an anti-microbial agent to prevent infection and facilitate a more successful surgical application. (par. 0010).

Response to Arguments

Applicant's arguments filed 11/21/2006 have been fully considered but are considered moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



10/13/07

JLS



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER